

OL6204N-30/AP10

1625nm±10nm 30mW Pulsed MQW Laser Diode DIL Module with SMF.

1. DESCRIPTION

OL6204N-30/AP10 is a 1625nm Laser Diode in DIL package with SMF.

2. FEATURES

- Fiber output: Po=30mW
- Pulsed MQW FP Laser
- 14-pin DIL package module
- Single mode fiber (SMF)
- Built-in TEC

3. APPLICATION

- OTDRs
- Optical measuring instruments

4. OPTICAL AND ELECTRICAL CHARACTERISTICS

(TLD= 25°C, 10μs pulse width and 1% duty)

| Parameter | Symbol | Test Conditions | Min. | Typ. | Max. | Unit |
|-----------------------|-----------------|-------------------|------|------|------|------|
| Threshold Current | I _{th} | --- | --- | 30 | 70 | mA |
| Operation Current | I _{op} | Po=30mW | --- | 500 | 600 | mA |
| LD Forward Voltage | V _f | | --- | 2.0 | 3.0 | V |
| Center Wavelength | λ _c | | 1615 | 1625 | 1635 | nm |
| Spectral Width | σ | Po=30mW, RMS×1 | --- | 5 | 10 | nm |
| Cooler Capacity | ΔT | Po=30mW | 40 | --- | --- | °C |
| Cooler Current | I _c | ΔT=40° C, Po=30mW | --- | --- | 1.2 | A |
| Cooler Voltage | V _c | | --- | --- | 2.5 | V |
| Thermistor Resistance | R _{th} | --- | 9.5 | 10 | 10.5 | kΩ |

5. ABSOLUTE MAXIMUM RATING

(Tc = 25°C, unless otherwise specified)

| Parameter | Symbol | Rating | Unit |
|-----------------------|--------------------|------------|------|
| Fiber Output Power | P _o | 36* | mW |
| LD Reverse Voltage | V _{R(LD)} | 2.0 | V |
| LD Forward Current | I _{F(LD)} | 700* | mA |
| Cooler Current | I _c | 1.2 | A |
| Operating Temperature | T _{opr} | -20 to +65 | °C |
| Storage Temperature | T _{stg} | -40 to +70 | °C |

Pulse width ≤ 10μs , duty ≤ 1%

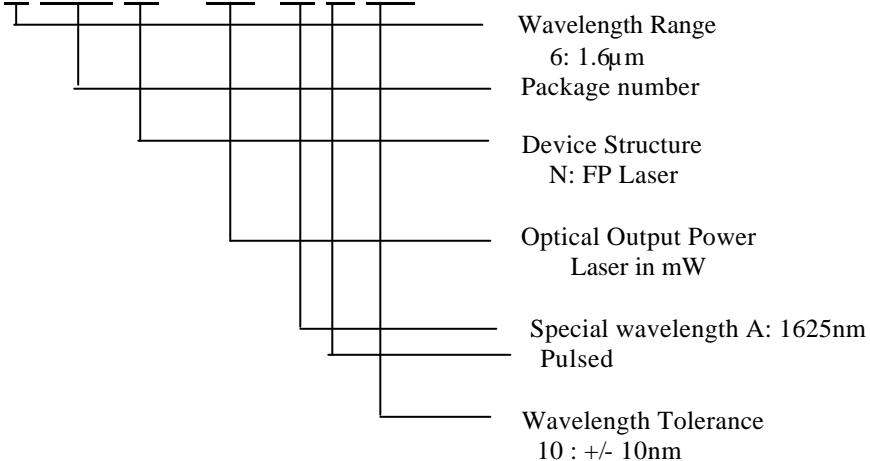
Exceeding these ratings may lead to immediate destruction or permanent deterioration of the device.

6. CONNECTOR AND FIBER SPECIFICATIONS

| Parameter | Specifications | Unit |
|---------------------|----------------|------|
| Type | SMF | --- |
| Mode Field Diameter | 10±1 | μm |
| Cladding Diameter | 125±2 | μm |
| Jacket Diameter | 900 | μm |
| Length | 1 (Min.) | m |
| Connector | FC/SPC | --- |

7. ORDERING INFORMATION

OL 6 204 N – 30 /A P 10

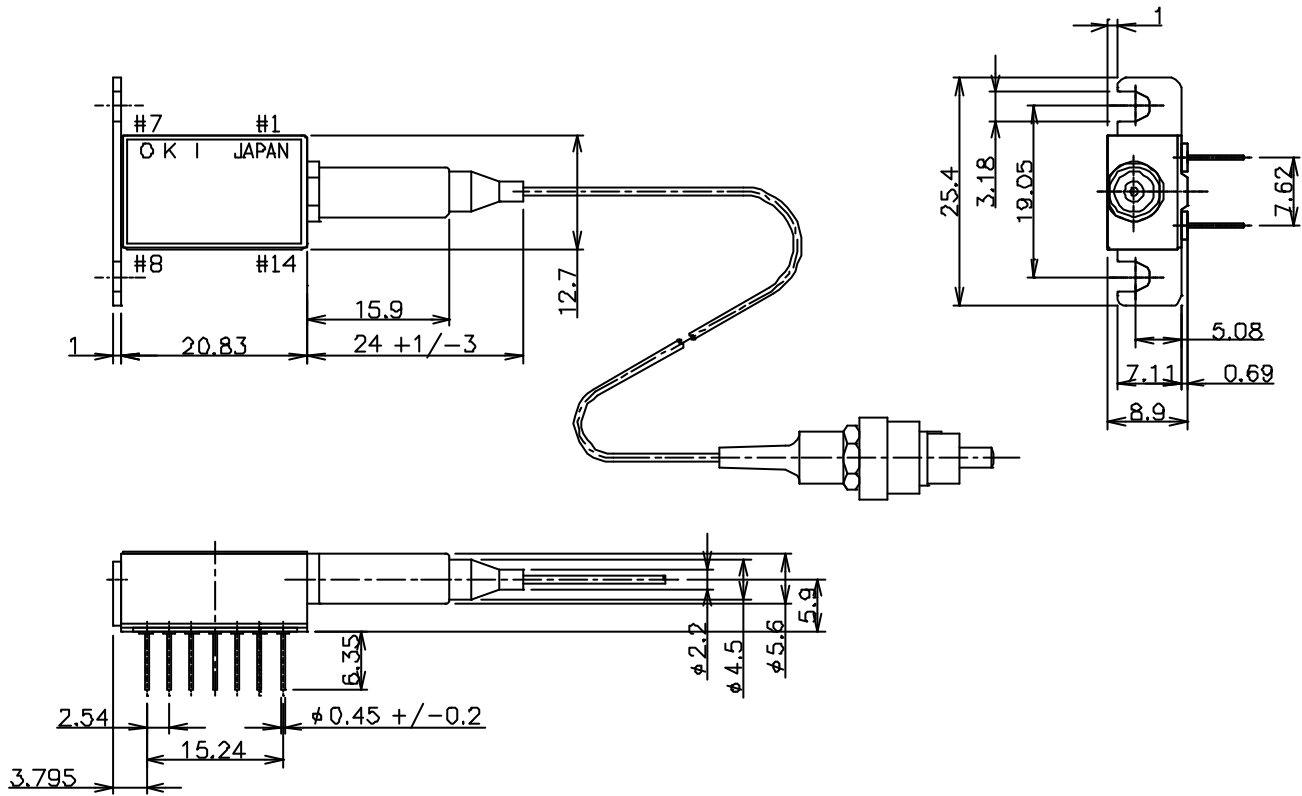


8. ATTACHED DATA (at 25°C)

(1) If-P_o graph (2) spectrum graph at P_o=30mW (3) operating current (I_{op}) at P_o=30mW (4) Center wavelength (λ_c) at P_o=30mW (5) Spectral Width (σ) at P_o=30mW (6) Threshold current (I_{th})

9. OUTLINE DRAWING

All dimensions in millimeters
 Tolerances unless noted +/-0.5
 Package No. 204(Unit: mm)



Package Pinout

| Pin No. | Function | Pin No. | Function |
|---------|---------------|---------|------------|
| 1 | TEC+ | 8 | NC |
| 2 | NC | 9 | LD Cathode |
| 3 | NC | 10 | GND |
| 4 | NC | 11 | Thermistor |
| 5 | LD Anode(GND) | 12 | Thermistor |
| 6 | NC | 13 | NC |
| 7 | NC | 14 | TEC- |

10. SAFETY INFORMATION ON THIS PRODUCT



| | |
|--|--|
| <p>Warning</p> <p>Laser Beam</p> | <p>A laser beam is emitted from this laser diode during operation. The invisible or visible laser beam, directly or indirectly, may cause injury to the eye or loss of eyesight.</p> <p>Do not look directly into the laser beam.</p> <p>Avoid exposure to the laser beam, any reflected or collimated beam.</p> |
| <p>Caution</p> <p>GaAs Product</p> | <p>The product contains gallium arsenide, GaAs. GaAs vapor and powder are hazardous to human health if inhaled, ingested or swallowed.</p> <p>Do not destroy or burn the product.</p> <p>Do not crush or chemically dissolve the product.</p> <p>Do not put the product in the mouth.</p> <p>Observe related laws and company regulations when discarding this product. The product should be excluded from general industrial waste or household garbage.</p> |
| <p>Caution</p> <p>Optical Fiber</p> | <p>A glass-fiber is attached on the product. Handle with care.</p> <p>When the fiber is broken or damaged, handle carefully to avoid injury from the damaged part or fragments.</p> |

All specifications described herein are subject to change without notice.

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